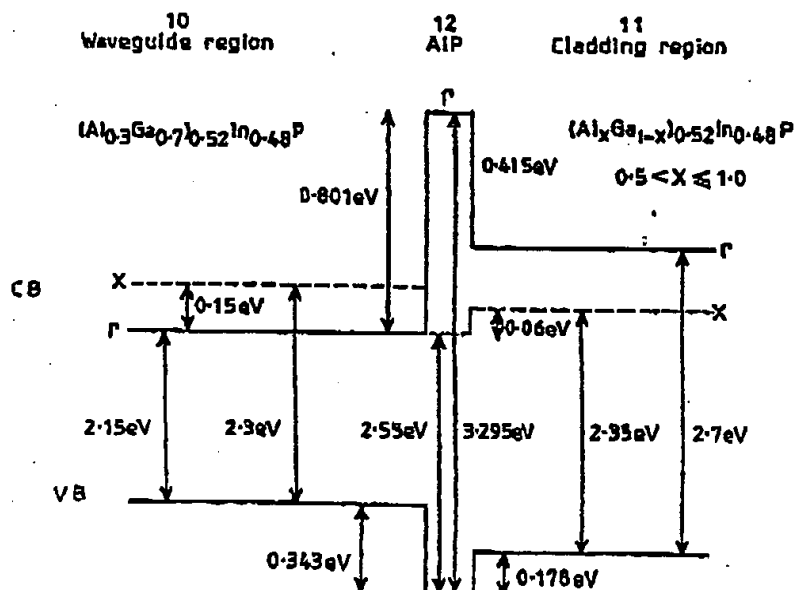




## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification <sup>7</sup> : <b>H01S 5/32</b>	<b>A1</b>	(11) International Publication Number: <b>WO 00/36719</b> (43) International Publication Date: <b>22 June 2000 (22.06.00)</b>
(21) International Application Number: <b>PCT/JP99/07053</b> (22) International Filing Date: <b>15 December 1999 (15.12.99)</b> (30) Priority Data: <b>9827492.1</b> <b>15 December 1998 (15.12.98)</b> <b>GB</b> (71) Applicant (for all designated States except US): <b>SHARP KABUSHIKI KAISHA [JP/JP]; 22-22, Nagaike-cho, Abeno-ku, Osaka-shi, Osaka 545-8522 (JP).</b> (72) Inventor; and (75) Inventor/Applicant (for US only): <b>NAJDA, Stephen, Peter [GB/GB]; 17 Wykeham Crescent, Oxford OX4 3SD (GB).</b> (74) Agent: <b>YAMAMOTO, Shusaku; Crystal Tower, 15th floor, 2-27, Shiromi 1-chome, Chuo-ku, Osaka 540-6015 (JP).</b>	(81) Designated States: <b>JP, KR, US, European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE).</b>  <b>Published</b> <i>With international search report.</i> <i>Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i>	

## (54) Title: AN OPTICAL SEMICONDUCTOR DEVICE



## (57) Abstract

An optical semiconductor device comprising: an active region; and a p-doped cladding region disposed on one side of the active region; wherein an electron-reflecting barrier is provided on the p-side of the active region for reflecting both  $\Gamma$ -electrons and X-electrons, the electron-reflecting barrier providing a greater potential barrier to  $\Gamma$ -electrons than the p-doped cladding region.

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